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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/517,155	01/10/2005	Chawnsang Chang	21108.0011U6	5685
23859 7590 06/21/2007 NEEDLE & ROSENBERG, P.C. SUITE 1000 999 PEACHTREE STREET ATLANTA, GA 30309-3915			EXAMINER BORGEEST, CHRISTINA M	
			ART UNIT 1649	PAPER NUMBER
			MAIL DATE 06/21/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/517,155	Applicant(s) CHANG, CHAWNSHANG	
	Examiner Christina Borgeest	Art Unit 1649	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) See Continuation Sheet is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-7, 9-11, 13, 20-23, 28, 29, 31-39, 46, 50, 52-60, 62, 69, 74, 77, 80, 81, 86, 93, 96 and 99 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Continuation of Disposition of Claims: Claims pending in the application are 1-7,9-11,13,20-23,28,29,31-39,46,50,52-60,62,69,74,77,80,81,86,93,96 and 99.

DETAILED ACTION***Formal Matters***

Claims 31-32 and 34 contain the following defects:: these claims depend from a cancelled claim, thus cannot be properly grouped with the inventions listed below. Evidence that they are unrelated to claims 29 and 33 can be found in claim 34, which is drawn to a method of ***inhibiting*** androgen receptor transactivation and (and claims 31-32 are the products for carrying out said method), whereas claims 29 and 33 are drawn to a method of ***enhancing*** androgen receptor transactivation and the product for carrying out the method. It is recommended that should the Applicants wish these claims to be examined that they be made dependent upon a non-cancelled claim.

Election/Restrictions

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-7, 9-11, and 13 are drawn to a composition having at least 80% identity to SEQ ID NO: 1 or a cell or an animal comprising said composition and a method of identifying a molecule that modulates the activity of androgen receptor comprising administering the molecule to a system comprising androgen receptor and the composition of claim 1, assaying the activity of androgen receptor, and selecting molecules that modulate the activity of androgen receptor, wherein the system comprises the molecules recited in claims 10 or 13, or alternatively, wherein the system comprises a nucleic acid encoding the molecules recited in claim 11.

Group II, claim(s) 20-21, drawn to a method of identifying a dominant negative inhibitor of androgen receptor comprising administering a mutagen to a nucleic acid encoding an ARA interacting protein forming a nucleic acid encoding a mutated ARA interacting protein, performing a screening system, wherein the system comprising the mutated ARA interacting protein and androgen receptor, assaying the activity of the androgen receptor and identifying those mutated ARA interacting proteins that reduce androgen receptor activity.

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Group III, claim(s) 22-23 and 28-29 and 33, drawn to a composition comprising an ARA267 peptide comprising a peptide having at least 80% identity to SEQ ID NO: 34, or the fragments recited in claim 28, and to a nucleic acid encoding ARA267 recited in claim 22, and a method of enhancing androgen receptor transactivation comprising administering the composition of claim 22.

Group IV, claim(s) 35-37 and 39, drawn to drawn to a method of identifying a molecule that modulates the activity of androgen receptor comprising administering the molecule to a system comprising androgen receptor and the composition of claim 22, assaying the activity of androgen receptor, and selecting molecules that modulate the activity of androgen receptor, wherein the system comprises the molecules recited in claims 36 or 39 and/or wherein the system comprises a nucleic acid encoding the molecules recited in claim 37.

Group V, claim(s) 46, 52-55-60 and 62 are drawn to a composition comprising an isolated mutant of an ARA70 peptide comprising a peptide having at least 80% identity to SEQ ID NO: 26, a nucleic acid encoding the mutant ARA of claim 46, a cell and an animal comprising said nucleic acid, methods of inhibiting androgen receptor transactivation comprising administering said polypeptide and/or nucleic acid, and a method of identifying a molecule that modulates the activity of androgen receptor comprising administering to a system comprising androgen receptor and the composition of claim 46, assaying the activity of androgen receptor and selecting molecules that modulate the activity of androgen receptor, wherein the system comprises the molecules recited in claim 59 or 62 or a nucleic acid encoding the molecules recited in claim 60.

Group VI, claim(s) 50, drawn to an isolated peptide comprising FXXLF that interacts with androgen receptor, and is not one of the peptides recited in claim 50.

Group VII, claim(s) 69 and 74, drawn to methods of inhibiting androgen receptor activity comprising administering a molecule that blocks interaction between the androgen receptor and gelsolin.

Group VIII, claim(s) 77, 80 drawn to identifying a mutant androgen receptor activity inhibiting molecules, comprising administering a molecule or set of molecules to a system, wherein the system comprising the mutant androgen receptor and gelsolin, and assaying whether the molecule reduces the interaction between the mutant androgen receptor and gelsolin and a method of making said mutant mutants.

Group IX, claim(s) 81 and 86, drawn to a system comprising ARA267 or a peptide or protein comprising FXXLF, and wherein the system further comprises three of the molecules recited in claim 86.

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Group X, claim(s) 93 and 96, drawn to administering a molecule that blocks an interaction between the androgen receptor and supervillin.

Group XI, claim(s) 99, drawn to a method of identifying an androgen receptor activity inhibiting molecule, comprising administering a molecule or set of molecules to a system, wherein the system comprise androgen receptor and supervillin, and assaying whether the molecule reduces the interaction between androgen receptor and supervillin.

The inventions listed as Groups I-XXI do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons. According to 37 CFR 1.475, a national stage application containing claims to different categories of invention will be considered to have unity of invention if the claims are drawn only to one of the following combination of categories:

- (1) A product and a process specially adapted for the manufacture of said product; or
- (2) A product and a process of use of said product; or
- (3) A product, a process specially adapted for the manufacture of the said product, and a use of the said product; or
- (4) A process and an apparatus or means specifically designed for carrying out the said process; or
- (5) A product, a process specially adapted for the manufacture of the said product, and an apparatus or means specifically designed for carrying out the said process.

If an application contains claims to more or less than one of the combinations of categories of invention set forth in paragraph (b) of this section, unity of invention might not be present. In the instant case, multiple products, processes of manufacture and uses are claimed, thus the first invention of the category first mentioned in the claims of the application and the first recited invention of each of the other categories related thereto will be considered as the main invention in the claims (i.e., Group I, a polynucleotide 80% identical to SEQ ID NO: 1 and methods of use therefor). In other words, PCT rules provide for the search and examination of the first recited product, the first recited method of making said product and the first recited method of using said product. Groups I-XI represent multiple products and methods of using the products. Group I is drawn to a composition having 80% to SEQ ID NO: 1 (a nucleic acid) and methods for identifying said compositions. Group II is drawn to a screening method for identifying a dominant negative inhibitor of androgen receptor, which does not utilize the composition of Group I. Group III is drawn to a protein having at least 80% identity to SEQ ID NO: 34 (ARA267), the fragments thereof recited in claim 28, the nucleic acid encoding ARA267 or a cell or an animal comprising said nucleic acid, and a method of enhancing androgen receptor transactivation using said composition, and is not drawn

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to the composition of Group I. Group IV is a screening method comprising administering to a system comprising androgen receptor and the composition of claim 22, however, it is a separate use for this composition than that which is recited in Group III (screening as opposed to administration/treatment). Group V is a different composition (polypeptide as shown in SEQ ID NO: 26) from Group I, nucleic acid and methods of use. Group VII is drawn to methods of inhibiting androgen receptor activity comprising administration of a mutant that blocks interaction between the androgen receptor and gelsolin. Group VIII is drawn to a method of identifying mutants that reduce interaction between a mutant androgen receptor and gelsolin. Group IX is drawn to a system comprising ARA267 or a peptide or protein comprising FXXLF. Group X is drawn to a method of administering a molecule that blocks an interaction between the androgen receptor and supervillin. Group XI is drawn to a method of screening for a molecule that blocks an interaction between androgen receptor and supervillin. The inventions of Groups II-XI are drawn to different products and/or methods from Group I, the main invention, thus do not share a special technical feature with Group I.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christina Borgeest whose telephone number is 571-272-4482. The examiner can normally be reached on 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Chan can be reached on 571-272-0841. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Christina Borgeest, Ph.D.

/Elizabeth C. Kemmerer/
Primary Examiner, Art Unit 1646